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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

RODRIGUEZ, RUTH C

ART UNIT

PAPER NUMBER

3677

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,592

Applicant(s)

LUBERA ET AL.

Examiner

Ruth C Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6,9-14,18,19,22-27,57-64 and 68-100 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-14,18,19,22 and 68-94 is/are allowed.
- 6) ☒ Claim(s) 2-6,23-27,57-64 and 95-100 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2-6, and 57-63 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 2 recites the limitation "wherein each of the first and second axes are generally parallel a longitudinal axis of the retaining portion". However, the specifications do not include a description of the spatial relationship between the first and second axes. The specifications recites, "each of the wing members 100 is illustrated to be twisted about an axis 112 in a first rotational direction ...". Figure 8 illustrates the axis 112 (as points) for the first and second wing members in a top sectional view that does not provide any information on how these axes extend. The spatial limitation recited in claim 2 fails to provide a proper description of the spatial relationship between the axes because if the rotational movement is done in accordance with the description where lateral surfaces adjacent to the tip portion of the wing are to remain parallel to each other during twisting and where one lateral end of the tip portion is above an opposite lateral end of the tip portion then the first axis is not parallel to the second axis and the longitudinal axis will not be parallel to the first and

second axes. If the twisting motion for each tip portion was made by having the first axis to be parallel to the second axis and to the longitudinal axis, the opposite lateral ends of the tip portion will be at the same height. In order, to have one tip portion being lower than the other tip portion the axis along which the wing members are twisted need to be inclined in order to have one lateral end above the other lateral end. For purposes of examination, if this limitation is believed to read in the claimed invention then it will also read on the reference by Murray.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 2-5 and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by Murray (US 4,300,865).

A resilient clip (10) secures a first member (P) to a second member (W) (Fig. 1). The resilient clip comprising a flange portion (12), an inserting portion (16a) and a retaining portion (22). The flange portion has an aperture (13) to receive a threaded fastener (S) to couple the second member to the flange portion (Fig. 1). The insertion portion is configured to be inserted into a hole (O) formed into the first member (Fig. 1). The inserting portion is coupled to the flange portion (Figs. 1-5). The retaining portion is coupled to the insertion portion and has first and second wing members (22). Each of the first and second wing members have opposing lateral edges (Fig. 2-5). The first

wing member has a pair of opposite lateral edges (22a and the opposite free end edge located on the exterior of the clip) and is coupled to the insertion portion (entire lower surface of 16a). The second wing member has a pair of opposite lateral edges (22a and the opposite free end edge located on the exterior of the clip) and is coupled to the insertion portion at a location between its opposite lateral edges (entire lower surface of 16a). The first wing member is twisted about a first axis in a first direction (line between 22b and 22a Figs. 2-4). The second wing member is twisted about a second axis in the first direction (line between 22b and 22a Figs. 2-4). Each of the first and second wing members have a tip portion (22c). The tip portion of the first wing member and the tip portion of the second wing member are configured to co-engage with the first member (Fig. 1). Each of the first and second axes is generally parallel a longitudinal axis of retention (Fig. 4). Each of the tip portions is angled such that a lateral end of an associated one of the first and second wing members extends above an opposite lateral end of the associated one of the first and second wing members (Figs. 2 and 4).

Murray also discloses that:

- The tip portion is defined by an included angle of about 30 degrees to about 80 degrees (Figs. 2 and 4).
- The included angle of the tip portion is about 60 degrees (Figs. 2 and 4).
- The tip portion has a flat edge for contacting the first member (Figs. 2-4).
- Each of the first and second wing members further include a base portion (16a) that is fixedly coupled to the insertion portion (Figs. 2-5). The first and second

wing members being twisted such that their tip portions are twisted relative to their base portion by an angle of about 5 degrees to about 45 degrees (Figs. 2-5).

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claim 58, 95-97 and 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray.

Murray discloses a resilient clip having the limitations listed above in paragraph 4 for the rejection of claim 57. Murray fails to disclose that the angle is 30 degrees. However, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to have the angle being about 30 degrees. A change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955).

Murray discloses in combination, a resilient clip (10) engaging a structure (P) (Fig. 1). The resilient clip comprises a body portion (12,16). The body portion is inserted downwardly into a hole formed in the structure. The body portion includes a plurality of wing members (22). Each wing member has a base portion and terminates at a tip portion that is angled downwardly toward the base portion. Each of the tip portions are twisted about an axis such that an inwardly twisted end of the tip portion is positioned above an outwardly twisted end of the tip portion (Figs. 1-4). Murray fails to disclose a ratio of insertion force to pull-out force of about 0.04 to about 0.12. However, it would have been obvious to one having ordinary skill in the art at the time the invention was

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made to recognize provide a resilient clip with a ratio of insertion to pull-out force of about 0.04 to about 0.12 since Murray discloses that the construction of the wing members allows easy insertion of the clip and the extraction of the clip is very difficult once the clip is inserted into an opening of the structure (C. 3, L. 16-32). And even if the resilient clip taught by Murray does not comply with this ratio, one with ordinary skill in the art will recognize that the ratio could be achieved by changes the dimensions of the prior art until the desired ratio is obtained.

For the same reasons explained above, the ration of insertion force to pull-out force can be about 0.04 to about 0.10.

The resilient clip further comprises a flange portion (12) coupled to the body portion. The flange portion includes an aperture (13) having a helical lip (Figs. 2 and 3). The helical lip threadably engages a threaded fastener (S).

Each of the tip portions include a flat edge contacting the structure (Figs. 1-5).

7. Claims 6 and 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray in view of Anderson (US 5,251,467).

Murray discloses a resilient clip having the limitations listed above in paragraph 4 for the rejection of claims 2-5. Murray fails to disclose that the tip portion has an edge for contacting the first member into which a plurality of teeth is formed. However, Anderson teaches a cam lock comprising a pair of wing members (25). The wing members initially are shown have an edge with a flat surface for contacting a structure (5,6) (Figs. 5 and 6). Anderson also teaches that the wing members have an edge with a plurality of teeth (Fig. 7). The teeth will lock the edges of the wing members against

the structure and allow for variations in thickness of the structure. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a plurality of teeth in the edge of the wing members as shown by Anderson in the resilient clip disclosed by Murray. Doing so, will lock the edges of the wing members against the structure and allow for variations in the thickness of the structure.

The same rejection used above for claim 6 will be used for the rejection of claim 100 since Murray has the limitations mentioned above in paragraph 6 for the rejection of claim 95 and teeth will be operable to contact the structure.

8. Claims 23, 24, 26 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer (US 5,919,019) in view of Murray.

Fischer discloses a resilient clip (10) for engaging a structure (14) (Fig. 5). The resilient clip comprising a body portion having a pair of flanges (12), a pair of wing members (44,46) and a pair of abutting members (48). Each of the wing members has a base portion coupled to an associated one of the pair of flanges (Figs. 1, 2 and 4). Each of the wing members terminates at a tip portion (50). The tip portions of the wing members are configured to co-engage a first side of the structure and position a second side of the structure against the abutting members. Fischer fails to disclose that the wing members are angled downward toward the base. However as mentioned above, Murray teaches a resilient clip comprising wing members angled downward toward the base portion (Figs. 2-4). The first wing member has a first base portion with a pair of first opposite lateral edges (22a and the opposite free end edge located on the exterior

of the clip) and is coupled to an associated one of the flanges at a location between the first lateral edges. The second wing member has a second base portion with a pair of second opposite lateral edges (22a and the opposite free end edge located on the exterior of the clip) and is coupled to another associated one of the flanges at a location between its second lateral edges. The first wing member is twisted about a first axis in a first direction (line between 22b and 22a Figs. 2-4). The second wing member is twisted about a second axis in the first direction (line between 22b and 22a Figs. 2-4). Each of the first and second wing members have a tip portion (22c) that is angled downwardly toward the base portion. The tip portions of the first and second wing members are configured to co-engage a first side of the structure (Fig. 1). Each of the first and second axes is generally parallel a longitudinal axis of retention (Fig. 4). Each of the tip portions is angled such that a lateral end of an associated one of the first and second wing members extends above an opposite lateral end of the associated one of the first and second wing members (Figs. 2 and 4). The construction of the wing members allows easy insertion of the clip and the extraction of the clip is very difficult once the clip is inserted into an opening of the structure (C. 3, L. 16-32). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members angled downward toward the base portion as taught by Murray in the retaining portion of the resilient clip disclosed by Fischer. Doing so, will difficult the extraction of the clip from the structure once the clip is inserted into the opening while allowing easy insertion into the opening.

The resilient clip disclosed by Fischer further comprises a flange portion (12) coupled to the body portion. The flange portion including an aperture (16) adapted to threadably engage a threaded fastener. Fischer fails to disclose that the aperture includes a helical lip. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a helical lip instead of the sleeve disclosed by Fischer. Since the applicant does not provide any particular reason to use the helical lip instead of sleeve, one having ordinary skill in the art will recognize the interchangeable use of helical lips and sleeves to threadably engage a threaded fastener in resilient clips. Also, the sleeve simplifies the manufacture of the resilient clip since the helical lip is easily stamped in the flange.

Murray teaches that a lateral end of each tip portion includes a first lateral end and a second lateral end (26) opposite the first lateral end (Figs. 2-5). The first lateral end is nearest a central axis of the body portion and extending vertically above the second lateral end (Figs. 2-5).

9. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer/Murray as applied to claim 23 above, and further in view of Anderson.

The combination of Fischer and Murray used for the rejection of claim 23 has all the limitations listed above in paragraph 8. Fischer and Murray fail to disclose a plurality of teeth for contacting the structure. However as mentioned above, Anderson shows that the wing members have an edge with a plurality of teeth. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a plurality of teeth in the edge of the wing members as shown by

Anderson in the resilient clip disclosed by Fischer and modified by Murray. Doing so, will lock the edges of the wing members against the structure and allow for variations in the thickness of the structure.

10. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer/Murray as applied to claim 26 above, and further in view of Hansz and Ueno.

The combination of Fischer and Murray having all the limitations listed above in paragraph 8 for the rejection of claim 26 fails to disclose a spacing structure having first and second flange members. However, Hansz demonstrates a mounting clip assembly (10) for securing a first member (26) to a second member (12). The clip assembly comprises a resilient clip (58) and a spacing structure (48). The spacing structure has a first flange coupled (52) to the flange portion of the resilient clip. The mounting clip assembly demonstrated by Hansz improves quality because it reduces loose assemblies and is easier to install (C. 2, L. 1-4). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use the a spacing structure as demonstrated by Hansz with the resilient clip disclosed by Fischer and modified by Murray. Doing so, will improve the quality of the installation because the system is easier to install and reduces loose assemblies due to clips not being seated properly.

Regarding to having a spacing structure with a second flange being coupled to an outer edge of the first flange, Ueno shows a connector device for securing a first member (P1) to a second member (P2) (Figs. 9-10(B)). The connector comprises a main body (3) having two flange members (1, 11) coupled to the outer edge of the main

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body and tapering downwardly toward the retaining portion (8a) and outwardly from the main body (Figs. 2-4 and 6). The flange members can elastically deform to prevent wobbling between the connector and the first or second members (C.6, L. 24-34).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a second flange member as shown by Ueno coupled to an outer edge of the flange member demonstrated by Hansz with the resilient clip disclosed by Fischer and modified by Murray. Doing so, will prevent wobbling between the resilient clip and the first structure.

11. Claims 59-63 and 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray as applied to claim 2 and 97 above, and further in view of Hansz and Ueno.

Murray discloses a resilient clip having all the limitations listed above in paragraph 4 for the rejection of claim 2. Murray fails to disclose a spacing structure having first and second flange members. However as described above, Hansz teaches a mounting clip assembly comprising a spacing structure. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a spacing structure as taught by Hansz with the resilient clip disclosed by Murray. Doing so, will improve the quality of the installation because the system is easier to install and reduces loose assemblies due to clips not being seated properly.

Regarding to having a spacing structure with a second flange being coupled to an outer edge of the first flange, Ueno demonstrates a connector device comprising a main body having two flange members. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a second

flange member as demonstrated by Ueno coupled to an outer edge of the flange member taught by Hansz with the resilient clip disclosed by Murray. Doing so, will prevent wobbling between the resilient clip and the first structure.

Both Hansz (C. 3, L. 23-25) and Ueno (C. 2, L. 12-27) disclose that the spacing structure is formed from a resilient material and that resilient material is plastic.

Hansz discloses that the first flange member has a square shape. But, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a circular shape instead of a square shape because a change in shape of the prior art is considered a design choice. Also, one of ordinary skill in the art will recognize that the first flange member having a circular shape will perform equally as a flange member having a square shape specially since the applicant does not disclose and advantage derived from this shape.

Ueno shows a second flange member that extends entirely around a perimeter of the main body.

The same rejection of claim of claim 59 will be used to reject claim 98 that depends on rejected claim 97 that has all the limitations mentioned above in paragraph 6.

Allowable Subject Matter

12. Claims 9-14, 18, 19, 22 and 68-94 are allowed.

Response to Arguments

13. Applicant's arguments filed on 03 October 2003 have been fully considered but they are not persuasive.

14. The Applicant argues that the Applicant's is neither taught nor suggested by the Murray reference. This argument fails to persuade. The Applicant center his argument in the newly added limitation that the retaining portion has wing members that are coupled to an insertion portion at a location between their opposite lateral edges. As explained above, if the insertion portion is taken as the entire lower surface of legs 16, then Murray meets the limitations of the claim because the base portion of each wing members will be coupled to an insertion portion at a location between the opposite lateral edges of the wing member. The other issue resulting from this interpretation of claim 2 is whether the first and second axes are generally parallel a longitudinal axis of the retaining portion. However, as cited above this limitation is being rejected under 35 U.S.C. 112, first paragraph for failing to provide an enabling disclosure for this limitation. Therefore, although the axes used to twist the wing members is not parallel to the longitudinal axis of the retaining portion it can be considered to be generally parallel to the longitudinal axis just as the claimed resilient clip has axes that are generally parallel to the longitudinal axis. With respect to claim 23 having similar limitations as the limitations included in claim 2, Murray meets the limitation of this claim when the same interpretation used in claim 2 is used for claim 23.

15. Finally, the argument presented by the Applicant for the last set of newly added claims is that none of the references of record recite a ratio of insertion force to pull-out force of about 0.04 to about 0.12. The Examiner fails to be persuaded by this argument because Murray very clearly explains in lines 16-33 of column 3 that the wings allow easy insertion into the aperture in the structure since the wings deflect toward each

other when the clip is inserted into the aperture and will forceably snap back out once they clear the opening thereby driving the wing edges into the edge of the aperture and preventing their removal from the aperture by means of the steep angle of the free ends of the wing members and by means of prong provided at the end of each wing member. Therefore, although Murray fails to disclose a ratio of insertion force to pull-out force of about 0.04 to about 0.12, the value obtained by the resilient clip disclosed by Murray should have a value very close to this range. And even if the resilient clip taught by Murray does not comply with this ratio, one with ordinary skill in the art will recognize that the ratio could be achieved by changes the dimensions of the prior art until the desired ratio is obtained.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wiley (US 2,217,781), Poutpitch (US 2,509,192), Meyer (US 2,959,259), Osterland et al. (US 4,630,338), Kuffel (US 5,759,004), Cornell et al. (US 5,774,949) and Danby et al. (US 5,873,690) are cited to show state of the art with respect to resilient clips having some of the features disclosed by the current invention.

Hirohata (US 4,668,145) is cited to show state of the art with respect to a flange extending around the periphery of the main body of a fastener.

Van Order et al. (US 5,636,891) is cited to show state of the art with respect to the use of spacing structures and resilient clips.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C. Rodriguez whose telephone number is (703) 308-1881. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (703) 306-4115.


Submissions of your responses by facsimile transmission are encouraged. Technology center 3600's facsimile number for before final communications is (703) 872-9326. Technology center 3600's facsimile number for after final communications is (703) 872-9327.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Ruth C. Rodriguez
Patent Examiner
Art Unit 3677

RCR
rcf

December 12, 2003


ROBERT J. SANDY
PRIMARY EXAMINER